



# National Weather Service Tallahassee, Florida

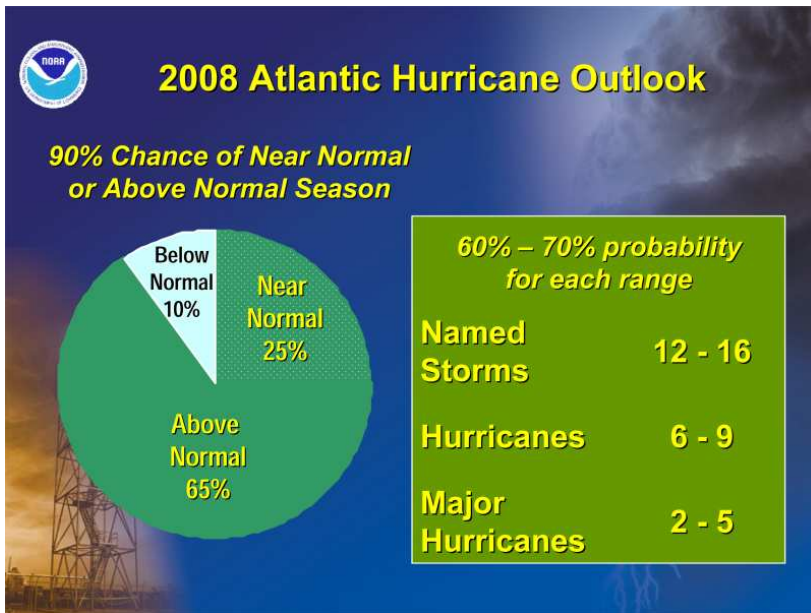


In this Spotter Letter:

- Hurricane Season has begun
- Hurricane Hunter plane comes to Apalachicola
- Afternoon Sea Breeze Thunderstorms

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The 2008 Atlantic Hurricane Season is Underway!



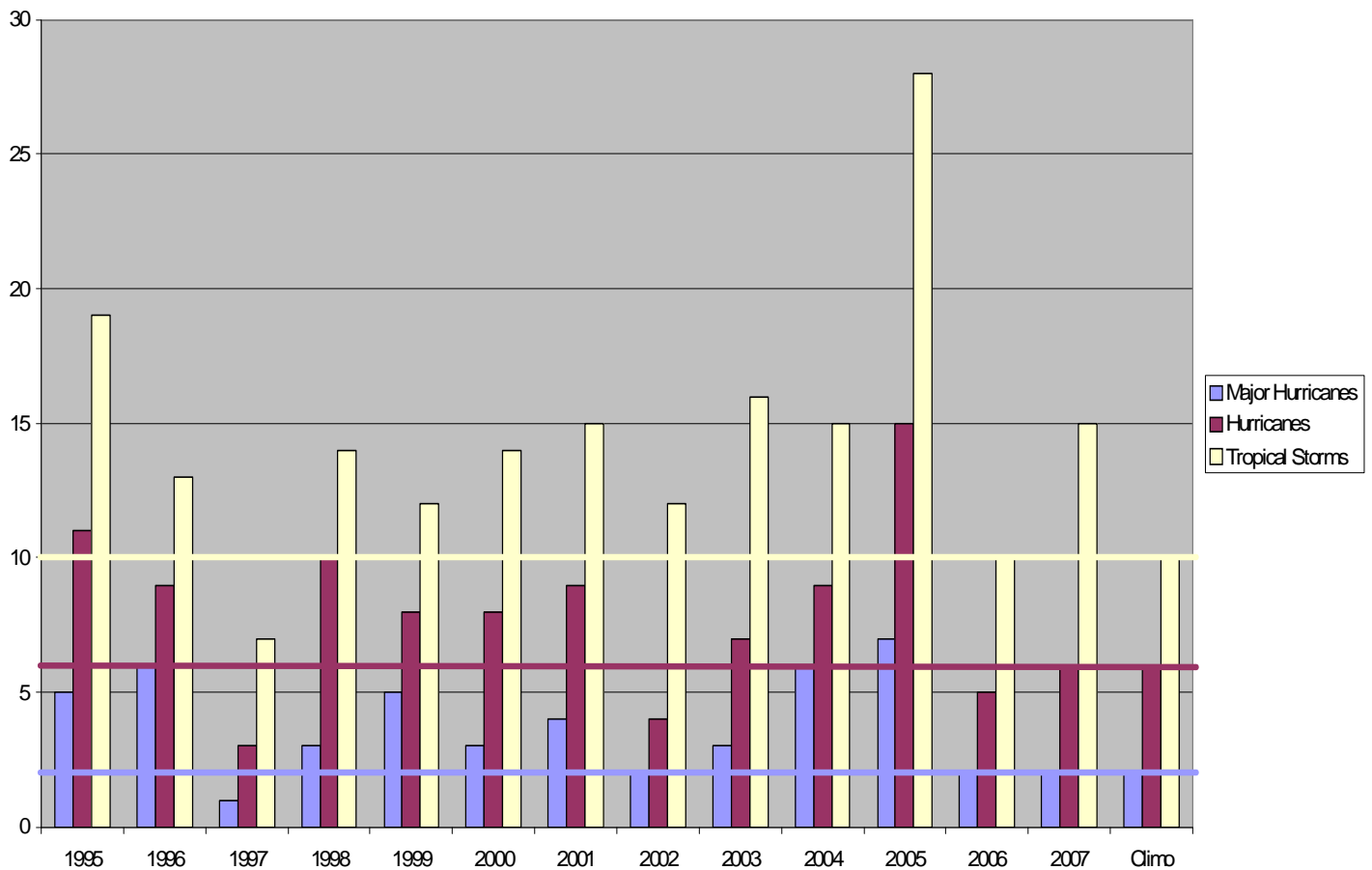
Hurricane season has begun and the National Oceanic and Atmospheric Administration's forecast indicates that once again we are looking at the possibility of an above normal hurricane season.

These forecasts look at long term trends in atmospheric conditions across the entire globe. The impacts from the El Nino Southern Oscillation in the equatorial pacific, sea surface temperature in the Atlantic, rainfall frequency in

the Sahara Desert in Africa, and other patterns around the globe all influence tropical cyclone development.

A normal tropical season consists of 10 named storms, 6 hurricanes, and 2 major hurricanes. A named storm, or tropical storm, is a tropical cyclone with sustained winds between 39 mph and 73 mph. A hurricane is a tropical cyclone with winds 74 mph or greater. A major hurricane has winds in excess of 110 mph.

### 1995 to 2007 Tropical Activity



The graph above indicates tropical cyclone activity in the North Atlantic from 1995 to 2007. The “climo” column indicates the normals for the Atlantic hurricane season. Since, 1995, there has only been one season with below normal tropical cyclone activity in the Atlantic (1997). Hurricane seasons in 2002, 2006, and 2007 were relatively near normal. Many remember the extremely active 2005 hurricane season with 28 named storms and 15 hurricanes.

With hurricane season already underway, now is the time to begin preparing and forming a plan for you and your family before a hurricane forms and impacts our region. Planning ahead, determining where you will go if you evacuate, and having the necessary supplies on hand will save you much needed time when the hurricane approaches. Don’t wait until the last minute to make these decisions. Also, listen to the advice of your local emergency management. If they order an evacuation for your area, heed their advice and evacuate. This decision may very well save your life.

Everyone should have a hurricane supply kit on hand that live in areas vulnerable to hurricanes. Here is a list of items to have in this kit:

- A 3 day supply of water (One gallon per person, per day)
- Non-perishable food
- One change of clothing and shoes per person
- Prescription and non-prescription medicines
- One blanket or sleeping bag
- First aid kit
- Battery powered NOAA Weather Radio
- Emergency Tools
- Flashlight and extra batteries
- Extra set of car keys
- Cash- Credit cards may not be useful in the days following the event due to power outages
- Any special items you may need to survive for at least one week.
- Identification
- Important papers like insurance policies and deeds to personal property.

People who do not wish to evacuate their community, but live in a vulnerable structure, like mobile homes or are surrounded by trees that could fall on your home, can evacuate to shelters set up by your local emergency management or the American Red Cross. It is important to remember that these shelters are not like hotels. These shelters only have on hand basic provisions. You should still bring your hurricane supply kit with you.

## Hurricane Hunter Plane comes to Apalachicola



On April 24<sup>th</sup>, one of the NOAA Hurricane Hunter P-3 Orion planes came to Apalachicola. Students and the public were able to tour this plane and meet the crew responsible for flying these dangerous missions. Whenever a hurricane is close enough to land, hurricane hunter planes go out and fly through the hurricanes and gather critical information needed to forecast the future path and intensity. Over the years, studies have shown that these planes and the data they collect drastically improve the quality of tropical cyclone forecasts.

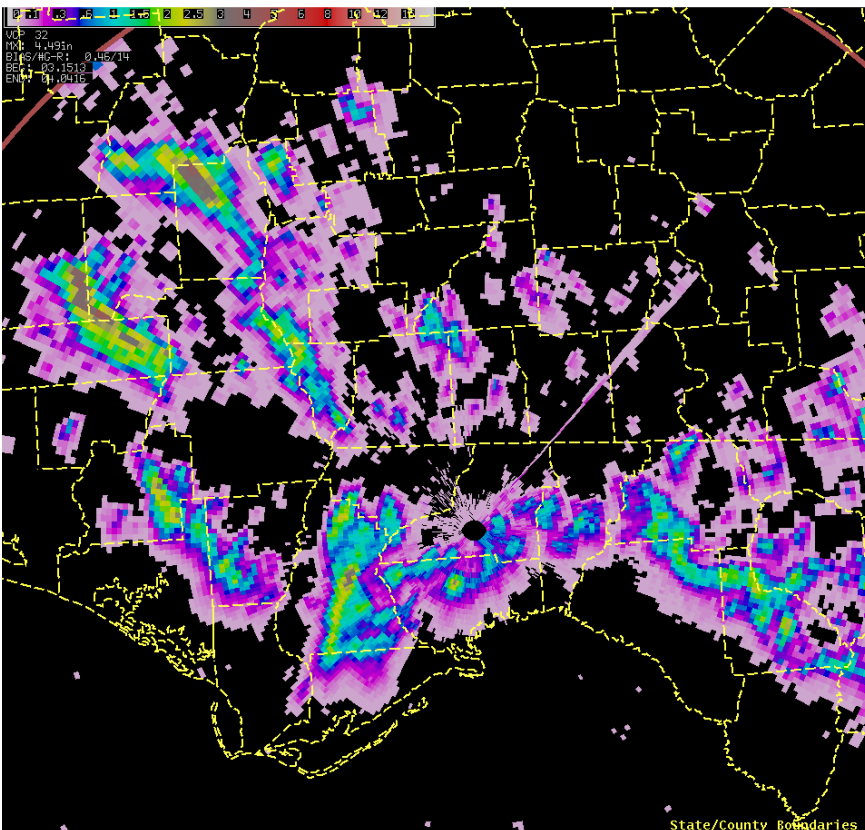
In addition to instruments located on the plane that samples wind speed, temperature, dewpoint, and pressure, meteorologists onboard launch dropsondes out of the belly of the plane. These dropsondes fall through the center of the storm and radio information back about the wind speeds in the eyewall of the hurricane as well as the pressure.



These two images above show where the dropsondes are sent out of the plane. A tube, as shown on the left and right, serves as the launch chamber for this radiosonde. The radiosonde (brown cylinder at right) is placed inside this tube and then released at the appropriate time as determined by the flight crew.

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## Afternoon Sea Breeze Thunderstorms



From now through much of September, afternoon sea breezes off the Gulf Coast, and on occasion the Atlantic Ocean, will help fuel thunderstorms that develop along these sea breeze boundaries. How much activity occurs each day depends on instability and which direction and how strong the winds are. This image at left is from June 3, 2008 and is a composite of all storms that developed that day. As you can see, much of the activity in the Florida Big Bend was shaped like the coastline as the sea breeze fronts didn't move too far inland in the east.



Many of these storms each afternoon can become strong to severe. The main threat from many of these storms is frequent to continuous cloud to ground lightning. While hail and strong gusty winds can come from these storms, with everyone enjoying the warm summer weather, extra caution should be taken when these thunderstorms are in the area. If you can hear thunder you can be struck by lightning. Move inside immediately. For maximum safety, practice the 30-30 rule.

The 30/30 Rule states that people should seek shelter if the "Flash-To-Bang" delay (length of time in seconds between a lightning flash and its subsequent thunder), is 30 seconds or less, and that they remain under cover until 30 minutes after the final clap of thunder.

A 30 second lead time is necessary prior to a storm's arrival because of the possibility of distant strikes. A 30 minute wait after the last thunder is heard is necessary because the trailing storm clouds still carry a lingering charge. This charge can and does occasionally produce lightning on the back edge of a storm, several minutes after the rain has ended.

Studies have shown most people struck by lightning are struck not at the height of a thunderstorm, but before and after the storm has peaked. This shows many people are unaware of how far lightning can strike from its parent thunderstorm. DO NOT wait for the rain to start before seeking shelter, and do not leave shelter just because the rain has ended.

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For some of you, this may be the first time you have received this spotter newsletter. We hope you enjoy these newsletters and the information in them. We would also like to thank you for providing us with spotter reports when severe weather threatens and participating in our training sessions, whether that is in person or online.

Finally, for those of you interested in hurricanes, we invite you to download our latest tropical products guide from our website. You can find this new guide on our tropical watch page at the following address:

<http://www.srh.noaa.gov/tlh/tropical/>

Then, look on the left hand side under the "useful links" section for the link to download this products guide.

Once again thank you for all your hard work in being spotters for the National Weather Service in Tallahassee, Florida

-Kelly Godsey